ABSTRACT

A substrate-handling robot which serves a processing tool such as a plating tool may be automatically controlled by a controller to perform a self-calibration procedure. As part of the procedure, an end effector of the robot is moved to interact with sensors provided on a calibration fixture that is positioned in a substrate placement location for which the calibration procedure is performed. The calibration fixture may have an opening formed therein to allow movement of the robot end effector within the calibration fixture. Sensor light beams generated by the sensors may interact with the end effector during the automatic calibration process so as to determine calibration data for the substrate placement location.